

## STATEMENT OF BASIS

as required by LAC 33:IX.2411, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0121827; AI 130692; PER20050001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I            **THE APPLICANT IS:**    Environmental Compliance Solutions, LLC  
   Environmental Compliance Solutions  
   12231 Industriplex Boulevard  
   Baton Rouge, LA 70890
- II            **PREPARED BY:**            Todd Franklin
- DATE PREPARED:**        January 10, 2006
- III          **PERMIT ACTION:**        issue LPDES permit LA0121827, AI 130692; PER20050001
- LPDES application received: September 7, 2005

### IV            FACILITY INFORMATION:

- A.           The application is for the treatment and discharge of the following types of wastewater: barge washwater, bilge and ballast waters, internal vacuum tank washwater, used crude inland oil spill waters, used oil and diesel fuel tank washwater, treated sanitary wastewater, washwater from oilfield equipment and vessels, industrial oily wastewater, slop wastewater, stormwater, washdown water, and kitchen grease wastewater.

Waste classified as nonhazardous oilfield waste (NOW) or exploration and production waste (E&P waste) shall not be discharged. However, wash water from tanks or vessels containing NOW or E&P waste may be discharged provided the oilfield waste has been drained or removed from the tanks prior to washing and provided that the facility has fulfilled any requirements from the Department of Natural Resources for handling NOW or E&P Waste. Effluent contaminated with chlorinated organic compounds shall not be discharged at this facility.

- B.           The facility is located in the Port of Iberia District Tract "1-2" in New Iberia, LA Iberia Parish.
- C.           The treatment facility consists of a membrane system developed to create ionization, filtration, purification, and biological degradation.
- D.           Outfall 001

Discharge Location:      Latitude 29° 55' 46" North  
   Longitude 91° 49' 16" West

Description:                treated chemical barge wastewater (15,000 GPD), bilge and ballast water (10,000 GPD), internal vacuum truck washwater (15,000 GPD), inland oil spill waters (15,000 GPD), used oil and diesel fuel tank washwater (10,000 GPD)

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Outfall 002

Discharge Location: Latitude 29° 55' 46" North  
Longitude 91° 49' 16" West

Description: Sanitary wastewater and kitchen grease wastewater (25,000 GPD)

V

RECEIVING WATERS:

The discharge is into an unnamed canal; thence into Commercial Canal in subsegment 060904 of the Vermilion-Teche River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 060904 of the Vermilion-Teche River Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Not Supported	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 060904 of the Vermilion-Teche River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 1998 Water Quality Management Plan, Volume 5, Part B, Water Quality Inventory, respectively.

VI

ENDANGERED SPECIES:

The receiving waterbody, Subsegment 060904 of the Vermilion-Teche River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005, from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII

HISTORIC SITES:

The discharge will be from a proposed facility. LDEQ has consulted with the State Historic Preservation Officer (SHPO) in a letter dated September 14, 2005, to determine whether construction-related activities could potentially affect sites or properties on or eligible for listing on the National Register of Historic Places. SHPO's response letter, dated October 13, 2005, stated that the facility as proposed will have no potential effects.

VIII

**PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

IX

**PROPOSED PERMIT LIMITS:**

Subsegment 060904, New Iberia Southern Drainage Canal-Origin to Weeks Bay, including Rodere Canal, Commercial Canal, and Port Canal, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 060904 was previously listed as impaired for nutrients, suspended solids/turbidity/siltation, organic enrichment/low DO, carbofuran, and phosphorus, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060904:

**New Iberia Southern Drainage Canal TMDLs for Dissolved Oxygen and Nutrients**

The TMDL states that "facilities without oxygen demanding parameters in their permit were assumed to exert a negligible oxygen demand in the receiving stream; therefore, these facilities were excluded from any further consideration in these TMDLs." The projected flow from Outfall 001 and 002 is less than 0.1 MGD. The TMDL only explicitly modeled one facility because it had a design flow of greater than 1 MGD. Therefore, this Department believes that the discharges from this facility will not cause or contribute to the impairments found in this receiving waterbody. However, BOD<sub>5</sub> limits shall be placed into the permit according to current state policies and guidelines.

**TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin**

As per this TMDL, point source loads are so small as to be insignificant, and because effective policies

are in place to limit TSS discharges, no specific reductions from point sources are required. Therefore, TSS limits will be permitted according to the current state policies for dischargers of this size and type.

*TMDL for the Pesticide Carbofuran in the Mermentau River and Vermilion-Teche River Basins*

There are no known point source discharges of Carbofuran in the Mermentau Basin, and therefore no allocation was given to point sources. There is one point source in the Vermilion-Teche (FMC Corp. LA0064360) but they do not discharge Carbofuran. Likewise no allocation was given to point source discharges in the Vermilion-Teche River Basin.

**Final Effluent Limits:**

**OUTFALL 001** - barge washwater, bilge and ballast waters, internal vacuum tank washwater, used crude inland oil spill waters, used oil and diesel fuel tank washwater, washwater from oilfield equipment and vessels, industrial oily wastewater, slop wastewater, washdown water, and stormwater.

The parameters listed in the EPA guidelines were compared to the same parameters used for LDEQ empirical limitations and the more stringent of the two values were screened against corresponding water quality standards. The more stringent values are being applied to Outfall 001.

The guidelines for the Centralized Waste Treatment Point Source Category are found in 40 CFR 437. This facility should fall into this point source category. Specifically, this facility falls under the guidelines in 40 CFR 437.45, new source performance standards for Subpart D-Multiple Wastestreams (Metals Treatment and Recovery, Oils Treatment and Recovery, and Organics Treatment and Recovery).

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Maximum	Basis
Oil & Grease	---	---	15 mg/l	BPJ based on other permits for similar facilities.
TSS	---	11.3 mg/l	29.6 mg/l	40 CFR 437.45
BOD <sub>5</sub>	---	53.0 mg/l	163 mg/l	40 CFR 437.45
Total Antimony	---	0.0312 mg/l	0.111 mg/l	40 CFR 437.45
Total Arsenic <sup>1</sup>	---	0.0199 mg/l	0.0993 mg/l	40 CFR 437.45
Total Cadmium <sup>1</sup>	---	0.00440 mg/l	0.0104 mg/l	Water Quality Based Limit
Total Chromium	---	---	0.150 mg/l	LDEQ Empirical Numbers
Total Cobalt	---	0.0703 mg/l	0.182 mg/l	40 CFR 437.45
Total Copper <sup>1</sup>	---	0.0302 mg/l	0.0716 mg/l	Water Quality Based Limit
Total Lead <sup>1</sup>	---	0.0214 mg/l	0.0507 mg/l	Water Quality Based Limit
Total Mercury <sup>1</sup>	---	0.000034 mg/l	0.000080 mg/l	Water Quality Based Limit
Total Nickel <sup>1</sup>	---	0.309 mg/l	0.794 mg/l	40 CFR 437.45
Total Selenium	---	0.0698 mg/l	0.176 mg/l	40 CFR 437.45
Total Silver	---	0.0122 mg/l	0.0318 mg/l	40 CFR 437.45
Total Tin	---	0.0367 mg/l	0.0955 mg/l	40 CFR 437.45
Total Titanium	---	0.00612 mg/l	0.0159 mg/l	40 CFR 437.45

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Maximum	Basis
Total Vanadium	---	0.0518 mg/l	0.0628 mg/l	40 CFR 437.45
Total Zinc <sup>1</sup>	---	0.227 mg/l	0.539 mg/l	Water Quality Based Limits
Acetone	---	7.97 mg/l	30.2 mg/l	40 CFR 437.45
Acetophenone	---	0.0562 mg/l	0.114 mg/l	40 CFR 437.45
Bis (2-ethylhexyl) phthalate <sup>1</sup>	---	0.101 mg/l	0.215 mg/l	40 CFR 437.45
2-Butanone	---	1.85 mg/l	4.81 mg/l	40 CFR 437.45
Butylbenzyl phthalate	---	0.0887 mg/l	0.188 mg/l	40 CFR 437.45
Carbazole	---	0.276 mg/l	0.598 mg/l	40 CFR 437.45
o-Cresol	---	0.561 mg/l	1.92 mg/l	40 CFR 437.45
p-Cresol	---	0.205 mg/l	0.698 mg/l	40 CFR 437.45
n-Decane	---	0.437 mg/l	0.948 mg/l	40 CFR 437.45
Fluoranthene <sup>1</sup>	---	0.0268 mg/l	0.0537 mg/l	40 CFR 437.45
n-Octadecane	---	0.302 mg/l	0.589 mg/l	40 CFR 437.45
Phenol	---	1.08 mg/l	3.65 mg/l	40 CFR 437.45
Pyridine	---	0.182 mg/l	0.370 mg/l	40 CFR 437.45
2,4,6-Trichlorophenol	---	0.106 mg/l	0.155 mg/l	40 CFR 437.45
Cyanide <sup>1&amp;2</sup>	---	178 mg/l	500 mg/l	40 CFR 437.45

<sup>1</sup> If any individual analytical test result is less than the minimum quantification level (MQL) listed in Section X of this statement of basis, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

<sup>2</sup> This monitoring requirement applies to metal-bearing wastewater containing cyanide

\*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement.

#### Other Effluent Limitations:

##### 1) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

##### 2) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

#### Final Effluent Limits:

**OUTFALL 002 – Treated Sanitary Wastewater and Kitchen Grease Wastewater**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD <sub>5</sub>	---	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for dischargers greater than 50,000 GPD expected flow.
TSS	--	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through BPJ for the type of treatment technology utilized at this facility.
Oil & Grease	---	---	15 mg/l	BPJ based on other permits for similar facilities.

\*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD<sub>5</sub> and TSS in terms of concentration.

#### Other Effluent Limitations:

##### 1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

##### 2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.2645.C.).

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## 3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X MINIMUM QUANTIFICATION LEVELS (MQL) OF VARIOUS TOXIC SUBSTANCES

<u>VOLATILE ORGANIC CHEMICALS</u>	<u>Required MQL (µg/l)</u>	<u>EPA Test Method</u>
acrolein (107-02-08)	50	624
acrylonitrile (107-13-1)	50	624
benzene (71-43-2)	10	624
bromodichloromethane		
(dichlorobromomethane) (75-27-4)	10	624
bromoform (tribromomethane) (75-25-2)	10	624
carbon tetrachloride (56-23-2)	10	624
chlorobenzene (108-90-7)	10	624
chloroform (trichloromethane)	10	624
chloromethane (methyl chloride) (74-87-3)	50	624
1,1-dichloroethane (75-34-3)	10	624
1,2-dichloroethane (107-06-2)	10	624
1,1-dichloroethylene (75-35-4)	10	624
dichloromethane (methylene chloride) (75-09-2)	20	624
cis-1,3-dichloropropene	10	624
trans-1,3-dichloropropene	10	624
ethylbenzene (100-41-4)	10	624
para-dichlorobenzene*	---	----
1,1,2,2-tetrachloroethane (79-34-5)	10	624
tetrachloroethylene (127-18-4)	10	624
toluene (108-88-3)	10	624
1,1,1-trichloroethane (71-55-6)	10	624
trichloroethylene (79-00-5)	10	624
vinyl chloride (chloroethylene) (75-01-4)	10	624

ACID EXTRACTABLE  
ORGANIC CHEMICALS

<u>ORGANIC CHEMICALS</u>	<u>Required MQL (µg/l)</u>	<u>EPA Test Method</u>
2-chlorophenol (95-57-8)	10	625
3-chlorophenol	10	625
4-chlorophenol	10	625
2,4-dichlorophenol (120-83-2)	10	625
2,3-dichlorophenol	10	625
2,5-dichlorophenol	10	625
2,6-dichlorophenol	10	625
3,4-dichlorophenol	10	625
2,4-dinitrophenol (51-28-5)	50	625
pentachlorophenol (87-86-5)	50	625
phenol (108-95-2)	10	625
2,4,6-trichlorophenol (88-06-2)	10	625

BASE/NEUTRAL EXTRACTABLE

<u>ORGANIC CHEMICALS</u>	<u>Required MQL (µg/l)</u>	<u>EPA Test Method</u>
anthracene (120-12-7)	10	625
benzidine (92-87-5)	50	625
bis(2-chloroethyl)ether (111-44-4)	10	625
bis(2-chloro-1-methylethyl)ether (39638-32-9)	10	625
bis(2-ethylhexyl)phthalate (117-81-7)	10	625
di-n-butyl phthalate (84-74-3)	10	625

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1,3-dichlorobenzene (541-73-1)	10	625
1,2-dichlorobenzene (95-50-1)	10	625
1,4-dichlorobenzene (106-46-7)	10	625
3,3-dichlorobenzidine (91-94-1)	50	625
diethyl phthalate (84-66-2)	10	625
dimethyl phthalate (131-11-3)	10	625
2,4-dinitrooluene (121-14-2)	10	625
1,2-dihenylhydrazine (122-66-7)	20	625
fluoranthene (206-44-0)	10	625
hexachlorobenzene (118-07-1)	10	625
hexachlorobutadiene (87-68-3)	10	625
hexachlorocyclopentadiene (77-47-4)	10	625
hexachloroethane (67-72-1)	20	625
isophorone (78-59-1)	10	625
nitrobenzene (98-95-3)	10	625
N-nitrosodimethylamine (62-75-9)	50	625
N-nitrosodiphenylamine (86-30-6)	20	625
<b>PESTICIDES &amp; PCB'S</b>	<b>Required MOL (µg/l)</b>	<b>EPA Test Method</b>
aldrin (309-00-2)	0.05	608
PCB's (Total)	1.0	608
gamma-BHC (Lindane, Hexachlorocyclohexane) (58-89-9)	0.05	608
chlordane (57-74-9)	0.2	608
4,4"DDD (TDE) (72-54-8)	0.1	608
4,4"DDE (72-55-9)	0.1	608
4,4"DDT (50-29-3)	0.1	608
dieldrin (60-57-1)	0.1	608
endosulfan I (alpha) (115-29-7)	0.1	608
endosulfan II (beta) (115-29-7)	0.1	608
endrin (72-20-8)	0.1	608
heptachlor (76-44-8)	0.05	608
methoxychlor*	---	---
2,3,7,8-tetrachlorodibenzo-p-dioxin (1764-01-6)	**	625
toxaphene (8001-35-2)	5.0	608
2,4-dichlorophenoxyacetic acid (2,4-D) (94-75-7)	10	509B
2-(2,4,5-trichlorophenoxy) propionic acid (2,4,5-TP, Silvex)	4	509B
<b>METALS</b>	<b>Required MOL (µg/l)</b>	<b>EPA Test Method</b>
antimony (7440-36-0)	60	200.7
arsenic (7440-38-2)	10	206.2
barium*	---	---
beryllium (7440-41-7)	5	200.7
cadmium (7440-43-9)	1	213.2
chromium III (16065-83-1)	10	200.7
chromium VI (7440-47-3)	10	200.7
copper (7550-50-8)	10	220.2
lead (7439-92-1)	5	239.2
fluoride*	---	---
mercury (7439-97-6)	0.2	245.1
nickel (7440-02-0)	40	200.7
nitrate (as N)*	---	---
selenium (7782-49-2)	5	270.2
silver (7440-22-4)	2	272.2
thallium (7440-28-0)	10	279.2



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zinc (7440-66-6)

**MISCELLANEOUS**

cyanide

total phenols

20

**Required MQL (µg/l)**

20

5

200.7

**EPA Test Method**

335.2

420.1

**XI**

**PREVIOUS PERMITS:**

There are no previous LWDPs, NPDES, or LPDES issued permits.

**XII**

**ENFORCEMENT AND SURVEILLANCE ACTIONS:**

**A) Inspections**

There have been no inspections performed for this facility.

**B) Compliance and/or Administrative Orders**

There are no Compliance Orders issued against this facility.

**C) DMR Review**

There are no DMRs on file for this facility.

**XIII**

**ADDITIONAL INFORMATION:**

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

The following **Monitoring Requirements, Sample Types, and Frequency of Sampling** are required in this permit.

**Outfall 001**

**Effluent Characteristics**

**Monitoring Requirements**

	<b><u>Measurement Frequency</u></b>	<b><u>Sample Type</u></b>
Flow	1/week	Estimate
TSS	1/week	Grab
BOD <sub>5</sub>	1/week	Grab
Oil & Grease	1/week	Grab
All other parameters	1/month	Grab

Outfall 002

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	1/week	Measure
All other parameters	1/month	Grab

**XIV TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in this Statement of Basis.

**XV REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report", Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart B - "The LPDES Program", Louisiana Department of Environmental Quality, 2004.

GPO Access. Electronic Code of Federal Regulations (e-CFR). [Online] Available <http://www.gpoaccess.gov/index.html>, January 9, 2006.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Mr. George Bevin, Environmental Compliance Systems, September 7, 2005.